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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/355,635	08/02/1999	PAUL JAMES CONROY	72005-7	6737

25269 7590 09/09/2004

DYKEMA GOSSETT PLLC  
FRANKLIN SQUARE, THIRD FLOOR WEST  
1300 I STREET, NW  
WASHINGTON, DC 20005

EXAMINER
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MIGGINS, MICHAEL C

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/355,635	CONROY ET AL.	
	Examiner	Art Unit	
	Michael C. Miggins	1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 20 May 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 20-33, 36-40 and 42-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 30-33 and 36-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Claims withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 12/11/2001.

## **WITHDRAWN REJECTIONS**

2. All of the 35 USC 103(a) rejections set forth in the non-final office action of 12/23/2003, pages 5-11, paragraphs 9-11 have been withdrawn.

## **REJECTIONS REPEATED**

3. There are no rejections repeated.

### ***Response to Arguments***

4. Applicant's arguments with respect to claims 30-33 and 36-40 have been considered but are moot in view of the new ground(s) of rejection.

## **NEW REJECTIONS**

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to

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be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 30-33 and 38-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phelps (U.S. Patent No. 4,298,634) in view of Heitzmann et al. (WO 89/02878).

Claim 30 recites an intended use (the limitation, "... used for delivering drinking water from corrosion due to water passing therethrough ...") and has been given little to no patentable weight since it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Phelps discloses a method for protecting a metal drinking water pipe comprising the steps of providing a metal drinking water pipe (since Phelps provides a ductile iron pipe, which at the very least is capable of being used as a water pipe for drinking water, see column 2, lines 47-51 and column 4, lines 10-12), depositing a cementitious composition on an inside surface of said metal drinking water pipe to form a lining therein (column 2, lines 47-51, column 3, lines 47-50), said cementitious composition comprising Portland cement (column 2, lines 52-56) and hardening said cementitious composition (column 3, lines 26-42), wherein the cementitious composition further comprises water, wherein the cementitious composition comprises not more than 50 parts by weight water, based on the weight of the cementitious composition when wet (column 4, lines

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10-51) and including the step of mixing the cementitious composition with sand to form a cementitious mortar composition, prior to being applied to said surface (column 4, lines 10-51) (applies to instant claims 30 and 38-40).

Phelps discloses applicant's invention substantially as claimed. However, Phelps fails to disclose the addition of 5-30 weight % metakaolin, or not more than 10 parts by weight metakaolin, wherein part of the Portland cement is replaced with a cement replacement material in an amount of not more than 70 parts by weight, and wherein said cement replacement material is at least one of ground granulated blast furnace slag and pulverized fuel ash.

Heitzmann et al. teach a Portland cement composition with disclose the addition of 5-30 weight % metakaolin, or not more than 10 parts by weight metakaolin (page 24 see claim 1), wherein part of the Portland cement is replaced with a cement replacement material in an amount of not more than 70 parts by weight, and wherein said cement replacement material is at least one of ground granulated blast furnace slag and pulverized fuel ash (pages 3-4) for the purpose of providing high early strengths, high ultimate strengths, durability and continues to gain strength at temperatures below freezing (page 1) (applies to instant claims 30-33).

The references are combinable since both disclose Portland cement compositions, especially since Phelps teaches that any hydraulic cement composition may be utilized such as Portland cement, calcium, aluminate etc. (Phelps, column 2, lines 52-56) and the Portland cement of Heitzmann et al.

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provides high early strengths, high ultimate strengths, durability and continues to gain strength at temperatures below freezing.

Therefore it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to have provided addition of 5-30 weight % metakaolin, or not more than 10 parts by weight metakaolin, wherein part of the Portland cement is replaced with a cement replacement material in an amount of not more than 70 parts by weight, and wherein said cement replacement material is at least one of ground granulated blast furnace slag and pulverized fuel ash to the Portland cement of Phelps in order to provide high early strengths, high ultimate strengths, durability and continues to gain strength at temperatures below freezing as taught or suggested by Heitzmann et al..

7. Claims 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phelps (U.S. Patent No. 4,298,634) in view of Heitzmann et al. (WO 89/02878), as applied to claims 30-33 and 38-40 above, and further in view of Allen et al. (WO 95/11863).

Phelps discloses applicant's invention substantially as claimed. However, Phelps fails to disclose that the cementitious composition further comprises an aggregate material and wherein the cementitious composition further comprises fibers as reinforcement.

Allen et al. teach a method for protecting a metal pipe (abstract) comprising the steps of providing a metal pipe, depositing a cementitious composition on an inside surface of said metal pipe (page 2, lines 5-19), wherein

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the cementitious material further comprises an aggregate material (page 3, lines 24-30) and wherein the cementitious composition further comprises fibers as reinforcement (page 3, lines 16-30) (applies to instant claims 36-37) for the purpose of providing a liner that is less costly to produce and does not crack (page 1, lines 22-24).

Therefore it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to have provided a cementitious composition further comprises an aggregate material and wherein the cementitious composition further comprises fibers as reinforcement in the Portland cement composition of Phelps in order to provide a liner that is less costly to produce and does not crack as taught or suggested by Allen et al..

### ***Conclusion***

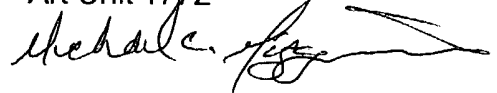
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Miggins whose telephone number is (571) 272-1494. The examiner can normally be reached on Monday-Friday; 1:30-10:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pyon Harold can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael C. Miggins  
Examiner  
Art Unit 1772



MCM  
September 2, 2004